

NAPRSTEK, V.

"Geologic conditions of the wider environs of Kraliky, Tajov, and Malachov,
west of Banska Bystrica."

p. 119 (Casppia Pro Mineralogii A Geologh, Vol. 2, no. 3, 1957, Czcholovakia)

Monthly Index of East European Accessions (EZAI) LC. Vol. 7, No. 2,
February 1958

NAPRSTEK, V.

"The coral Calamophyllia Rhaetiana Koby 1884 from the Rhaetian near Tajov in Banska Bystrica District."

pl2128 (Casopia Pro Mineralogii A Geologh; Vol. 2, no. 3, 1957, Czechoslovakia)

Monthly Index of East European Accessions (BEAI) LC. Vol. 7, No. 2,
February 1958

NAPRESTEK, V.

GEOGRAPHY & GEOLOGY

Periodicals: CASOPTIS PRO MINERALOGII A GEOLOGII Vol. 3, no. 2, 1958

NAPRESTEK, V. An out line of the geologic evolution of the Tertiary in the Sokolov basin. p. 163.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 5,
May 1959, Unclass.

NAPRSTEK V.

GEOGRAPHY & GEOLOGY

Periodicals: GEOLOGICKE PRACE; ZPRAVY No. 14, 1958

NAPRSTEK, V. Results of the geologic mapping between Slovenska Lupca and Poniky. p. 134.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 5,
May 1959, Unclass.

CZECHOSLOVAKIA

NAPRSTEK, Z; Institute of Clinical and Experimental Surgery
(Ustav Klinicke a Experimentalni Chirurgie), Prague.

"Possibility of Using Electronic Picture Converters in Physiological Research and Diagnosis."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, p 129

Abstract: The problem of recording physiological processes in ultraviolet or infrared light and converting the recordings to visible pictures is discussed. The use of such apparatus in ophthalmology, cytohistology, and the study of blood circulation is reviewed. 2 Western, 2 Czech references. Submitted at the 7th Seminary of Medical Electronics at Prague, 22 Apr 64.

CZECHOSLOVAKIA

UDC 615.831.85

NAPRSTEK, Z.; NAPRSTKOVA, J.; Institute of Clinical and Experimental Surgery (Ustav Klinicke a Experimentalni Chirurgie), Prague, Director (Reditel) Prof Dr B. SPACEK; Institute of Pathological Anatomy, Medical Faculty of Hygiene, Charles University (Ustav Patologicke Anatomie Lekarske Fakulty Hygienicke KU), Prague, Head (Prednosta) Docent Dr J. STOLZ.

"Use of a Laser in Experimental and Clinical Surgery."

Prague, Casopis Lekary Ceskych, Vol 105, No 21, 27 May 66, pp 561 - 566

Abstract [Authors' English summary modified]: Use of quantum light generators of the laser type in medical research is described. The use of lasers for severing of tissues, photocoagulation in areas of major functional importance and parenchymatous organs, in oncological, cardiovascular, and experimental surgery is discussed. The interaction of tissues in the cardiovascular system in a dog treated by laser rays is described. Morphological changes are compared to those obtained by electroresection and evaluated. 6 Figures, 47 Western, 8 Czech, 2 Russian references. (Manuscript received Feb 66).

1/1

- 205 -

NAPUKH, Z.

CHIPLAKOV, M.; NAPUKH, Z.

Sports festival of Kharkov tractor builders. Sov. profsoiuzy 3
no. 8:43-45 Ag'55. (MIRA 8:10)

1. Predsedatel' soveta fiskul'tury Khar'kovskogo traktornogo
zavoda (for Chiplakov) 2. Zaveduyushchiy uchebno-sportivnym
otdelom Tsentral'nogo soveta DSO "Torpedo"
(Kharkov--Sports)

BREZINA, R.; URVOLGYI, J.; ROSICKY, B.; CILKA, S.; DUSHNIKU, N.; NARACIK, K.;
DISHNICA, G.

Rickettsioses and infections caused by viruses of the psittacosis-
ornithosis-mammalian pneumonia group, in Albania. J. hyg. epidem.,
Praha 5 no.1:85-88 '61.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.
Institute of Biology, Czechoslovak Academy of Sciences, Praha, Ministry
of Health of Albania.

(MIYAGAWANELLA infect)

NARAD, R.; JERABEK, F.

Relative tests of trench diggers. I. p. 208.

MECHANISACE ZEMEDLSTVI. (Ministorstvo zemedelstvi a lesniho hospodarstvi) Praha, Czechoslovakia, Vol. 9, no. 9, Sept. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 11, Nov. 1959
Uncl.

NARADSE, G. M., CHIKOVANI, N. K.

"The character and peculiarities of nutrition of adults."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists
and Infectionists, 1959.

NARAI, S.

Pertussis. Gyermekgyógyászat 4 no.6:166-170 June 1953. (CIML 25:1)

1. Doctor. 2. Children's Infectious Department (Head Physician -- Dr. Sandor Narai), Szeged Municipal Council General Hospital (Director - Head Physician -- Dr. Pal Molnar).

MOLNAR, Amalia, dr.,; NARAI, Sandor, dr.,; FOLDES, Jozsef, dr.

Erythrocyte agglutination method in immunological studies in
scarlet fever. *Gyermekgyógyászat* 7 no.5-6:178-180 May-June 56.

1. Szegedi Megyei Jogu Varos Koskorhaza (Igas. Molnar Pal dr.,
Gyermekosztaly (Foorvos: Narai Sandor dr.)

(SCARLET FEVER, immunol.

hemagglutination with sheep erythrocytes (Hun))

(HEMAGGLUTINATION, in various dis.

scarlet fever, with sheep erythrocytes (Hun))

KARAI, Zh.; ZHDANSKI, K.

High-tension voltage regulators with low pedestal voltage. Prib.1
tekh.eksp. no.2:108-112 3-0 '56. (MLRA 10:2)

1. Tsentral'nyy nauchno-issledovatel'skiy institut fiziki Akademii
nauk Vengrii, otdelenie kosmicheskogo izlucheniya.
(Voltage regulations)

NARAKIDZE, N.M.; MIL'MAN, L.M., red.

[Conquest of space; list of scientific and popular literature in Russian for 1957-1963 on Soviet space flights] Zavoevanie kosmosa; spisok nauchno-populiarnoi literatury na russkom iazyke za 1957-1963 gg. o sovetskikh kosmicheskikh poletakh. Moskva, 1963. 21 p. (MIRA 17:10)

1. Moscow. Publichnaya biblioteka.

NARALENKOV, M.I.

Fundamental solutions to the Cauchy problem for generalized
homogeneous equations. Usp. mat. nauk. 20 no.4:203-205 JI-Ag
'65. (MIRA 1S:8)

11(2)

YUG/4-59-2-3/37

AUTHOR: Narančić, Nikola, Engineer

TITLE: Installations for Drying Natural Gas with a Solid Adsorbent (Uredjaji za sušenje zemnog plina krutim adsorbentom).

PERIODICAL: Nafta, 1959, Nr 2, pp 61-63 (YUG)

ABSTRACT: This is a supplement to an article which appeared in "Nafta", 1956, Nr 4 and 6. The author describes the standard equipment for dehydrating natural gas with solid adsorbents and the types of equipment used for regeneration of adsorbents, i.e. the equipment used for batch regeneration, with parallel flow and the short-cycle equipment developed in the USA. There are 3 flow-charts and 4 references of which 2 are Soviet and 2 English.

ASSOCIATION: Institut za naftu (Petroleum Institute), Zagreb.

Card 1/1

- NARADIA 12. VELIKO
1. "What affects the growth and development of embryos in the womb of the human?" Prof Dr Milivoje Čavčić, pp 1-3
 2. "What researches have adverse effects on the body?" Docent Dr Josip Čičić, pp 5-7.
 3. "Regarding the spontaneous loss of hair?" Trifunović Dr Vojko Čičić, pp 7-8.
 4. "Pharmacology?" Dr Radmila PROKOPIĆ, Assistant at the Ophthalmology Clinic, Belgrade, pp 10-11.
 5. "Genetic Prosis?" Dr Polina ČAVČIĆ, pp 12-14.
 6. "Purification of defense against microorganisms?" Dr Slavoljub ČAVČIĆ, pp 14-15.
 7. "Sources of vitamins and minerals required for good nutrition, good health and good work?" Dr Božidar ČAVČIĆ and Đorđe ČAVČIĆ, pp 17-20.
 8. "Compensation in man?" VELIKOVIĆ, Neuropsychiatrist, pp 20-23.
 9. "Health Education in Commercial Organizations?" Plan ČAVČIĆ, pp 23-25.
 10. "Perturbations in human health?" pp 26-28.
 11. "Prosthetic Elements in the Human Body?" Assistant at the Surgical Clinic (Čavčić) pp 29-31.
- 1-Genetics. 2-Genetics. 3-Genetics.

- napa a. v. l. k. o.*
1. "Vaccination of Children Against Diphtheria in the Best Protection Against This Disease" by Dr. Jakob A. GAD, Faculty of Medicine, Sarajevo; pp 7-9.
 2. "Vaccination of Children Against Diphtheria in the Best Protection Against This Disease" by Dr. Jakob A. GAD, Faculty of Medicine, Sarajevo; pp 7-9.
 3. "Vaccination of Children Against Diphtheria in the Best Protection Against This Disease" by Dr. Jakob A. GAD, Faculty of Medicine, Sarajevo; pp 7-9.
 4. "Vaccination of Children Against Diphtheria in the Best Protection Against This Disease" by Dr. Jakob A. GAD, Faculty of Medicine, Sarajevo; pp 7-9.
 5. "Vaccination of Children Against Diphtheria in the Best Protection Against This Disease" by Dr. Jakob A. GAD, Faculty of Medicine, Sarajevo; pp 7-9.
 6. "Vaccination of Children Against Diphtheria in the Best Protection Against This Disease" by Dr. Jakob A. GAD, Faculty of Medicine, Sarajevo; pp 7-9.
 7. "Vaccination of Children Against Diphtheria in the Best Protection Against This Disease" by Dr. Jakob A. GAD, Faculty of Medicine, Sarajevo; pp 7-9.
 8. "Vaccination of Children Against Diphtheria in the Best Protection Against This Disease" by Dr. Jakob A. GAD, Faculty of Medicine, Sarajevo; pp 7-9.
 9. "Vaccination of Children Against Diphtheria in the Best Protection Against This Disease" by Dr. Jakob A. GAD, Faculty of Medicine, Sarajevo; pp 7-9.
 10. "Vaccination of Children Against Diphtheria in the Best Protection Against This Disease" by Dr. Jakob A. GAD, Faculty of Medicine, Sarajevo; pp 7-9.
 11. "Vaccination of Children Against Diphtheria in the Best Protection Against This Disease" by Dr. Jakob A. GAD, Faculty of Medicine, Sarajevo; pp 7-9.
 12. "Vaccination of Children Against Diphtheria in the Best Protection Against This Disease" by Dr. Jakob A. GAD, Faculty of Medicine, Sarajevo; pp 7-9.

NARANCIC, Veselin, inz.

Efficacy of reparation welding with regard to local stresses.
Zavarivanje 4 no.5/6:98-102 My-Je '61.

NARANCIC, Veselin, inz.

Efficacy of reparation welding with regard to local stresses.
Zavarivanje 4 no.7:130-134 S '61.

NARANCSIK, Pal, okleveles kohomernok

Designing of precision castings. Koh lap 96 no.4: Suppl: Ontode 14
no.4:73-78 Ap '63.

NARANCSIK, Pal, dipl. inz. metalurgije

Construction of molds for precision casting. Ljevarstvo 9 no.1/6:
30-36 '64.

KOPCZYNSKI, Wladyslaw; NARAREWICZ, Teresa

A case of primary cancer of the oviduct. Gin.polska 31 no.3:
339-346 My-Je '60.

1. Z II Kliniki Chorob Kobietych i Poloznictwa A.M. w Gdansk
Kierownik: doc. dr med. W.Gromadzki oraz Z Zakladu Anatomii
Patologicznej A.M. w Gdansk Kierownik: prof. dr med. W.Gzarnocki
(OVIDUCTS neopl)

1. KURSANOV, D. N., PARNES, Z. N., ZARETSKAYA, I. I., NARAROV, I. N.
2. USSR (600)
4. Ketones
7. Mechanism of the reaction of cyclization with the aid of deuterium. Part 1.
Cyclization of isopropenylallylketone. Izv. AN SSSR. Otd. khim. nauk. no. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

NARASIMHAN, V.

AUTHORS: Beyer (Bayer), R.T., and Narasimhan (Narasiman), V. ^{46-4-2-13/20}

TITLE: On Absorption of Ultrasonic Waves of Finite Amplitude in Liquids
(O pogloshchenii ul'trazvukovykh voln konechnoy amplitudy v zhidkostyakh)

PERIODICAL: Akusticheskiy Zhurnal, 1958, Vol IV, Nr 2, pp. 196-197 (USSR)

ABSTRACT: Theory of propagation of finite-amplitude waves in gases was first discussed by Fay (Ref 1). According to this theory, which is also applicable to liquids, the coefficient of absorption α increases on increase of acoustic pressure. This effect is due to displacement of sound energy to higher harmonics because of non-linearity of the medium and non-linearity of the exact equation of motion. An approximate analysis (due to P.B. Lindsey, unpublished) showed that increase of α/ν^2 (where ν is the acoustic frequency) is directly proportional to acoustic pressure p_0 and inversely proportional to frequency ν . The present authors recently showed (Ref 6) that increase of α/ν^2 in water is an approximately linear function of p_0/ν at high values of p_0/ν . A figure on p. 196 shows the

Card 1/3

46-4-2-13/20

On Absorption of Ultrasonic Waves of Finite Amplitude in Liquids

results of the measurements made at frequencies from 3.8 to 8.7 Mc/s. The results obtained by Zarembo et al. (Ref 5) for water at 1.5 Mc/s are also given in this figure (crosses). The graph shows that the results of Ref 7 agree well with the authors' results (published in Ref. 6). An additional verification may be made by an analysis given by Fox and Wallace (Ref 2) who obtained an equation $\alpha/\nu^2 = \alpha_0/\nu^2 + K$, where α and α_0 are the absorption coefficients at finite and infinitesimally small amplitudes respectively and K is a correction. K depends on a coefficient of energy transfer from the fundamental frequency to the harmonics, on empirically determined coefficients in the quadratic equation of state for the liquid and on mean density of the liquid. Following Fox and Wallace the present authors calculated the slope of the dependence of α/ν^2 on p_0/ν for water. This calculated slope was found to be $1.5 \times 10^{-15} \text{ sec.cm}^{-1} \cdot (\text{Mc/s})^{-1} \cdot \text{atm}^{-1}$ compared with the experimental value, as given in the graph, of 2×10^{-15} . In view of approximations of Ref 2 this agreement between experiment and theory is excellent. The figure shows that the experimental curve departs from the straight line at small values of p_0/ν since it is in this region that the approximations made have the greatest effect. The experimental value

Card 2/3 of α depends also on the place where it is measured (the authors are

On Absorption of Ultrasonic Waves of Finite Amplitude in Liquids 46-4-2-13/20

indebted to V.A. Krasil'nikov who pointed out this fact); the values given in the present note are the maximum values of α . There is one figure and 6 references, 5 of which are American and 1 Soviet.

ASSOCIATION: Fizicheskiy Departament Braunovskogo universiteta, Providens, SSHA
(Physics Department, Brown University, Providence, U.S.A.)

SUBMITTED: November 16, 1957

Card 3/3 1. Waves—Absorption 2. Waves—Propagation—Theory

NARAVA, Jan, prom. biol; NEMCEK, Ondrej, prom. biol.

Free amino acids in the leaves of apricot tree. Biologia 16 no.4:
256-263 '61.

1. Katedra fyziologie rastlin Prirodovedecke fakulty Univerzity
Komenskeho v Bratislave (for Nemcek) 2. Vyskumny ustav krmovinarsky,
Trnava (for Navara)

(APRICOT)

NARAVTSEVICH, A.M.
~~Incorrectly knit fractures of the femur~~

[Incorrectly knit fractures of the femur] Nepravil'no srosshiesia
perelomy bedra. [Sverdlovsk] Medgiz, 1946. 127 p. (MLRA 7:4)
(Femur--Fracture)

NARAVTSEVICH, A. M.

"Treatment of Injuries to the Forearm and Wrist in
Tractor and Automatic Machine Factories," Khirurgiya,
No. 5, 1948. Prof., Sverklovski. -c1948-.

NARAVTSEVICH, A.M.

Modification in surgical therapy of costal kyphoses in kyphoscolioses. Vest.khir. 70 no.2:42-45 P '50. (CML 19:3)

1. Of the Sverdlovsk Institute of Restorative Surgery, Traumatology and Orthopedics of the Ministry of Public Health RSFSR (Director of Institute -- P.R.Bogdanov) and of the Department of Operative Surgery and Topographic Anatomy of Sverdlovsk Medical Institute (Head of Department -- A.M.Naravtsevich).

NARAVTSEVICH, Ya.M.

Operational fixed-date planning of the design, manufacture, and testing of new types of devices at the pilot plant of the Leningrad Special Construction Bureau of the State Geological Committee of the U.S.S.R. Geofiz. prikl. no.17:3-27 '63.

(MIRA 17:12)

1. Obshchestvennoye konstruktorskoye byuro Gosudarstvennogo geologicheskogo komiteta SSSR.

NARAY, D.

Modern dumping. P. 29 MUSZAKI ELET (Muszaki es természettudomanyos
Egyesuletok Szovetsege) Budapest Vol. 11, no. 3, Feb. 1956

SOURCE: EEAL IC Vol. 5, no. 7, July 1956

NARAY, D.; TOT, E.

Modern refuse disposal in Budapest. Gor. khoz. Mosk. 32
no.8:34-37 Ag '58. (MIRA 11:9)

1. Nachal'nik Upravloniya sanitarnoy ochistki g. Budapeshta
(for Naray). 2. Ad'yunkt Budapeshtskogo tekhnicheskogo universi-
teta (for Tot).

(Budapest--Refuse and refuse disposal)

NARAY, Dezso

Show removal by means of new methods. Musz elet 19 no.1:
10 2 Ja '64.

HUNGARY

PAL, Sándor, M.D., and NARAY, László, M.D., of the Department for Obstetrics and Gynecology at the Hospital of the Municipal Council (Varosi Tanács Kórhaza, Szülészeti-Megbetegészeti Osztály) in Kalocsa.

"Diagnosis for Pregnancy by Means of Klimovan Injection"

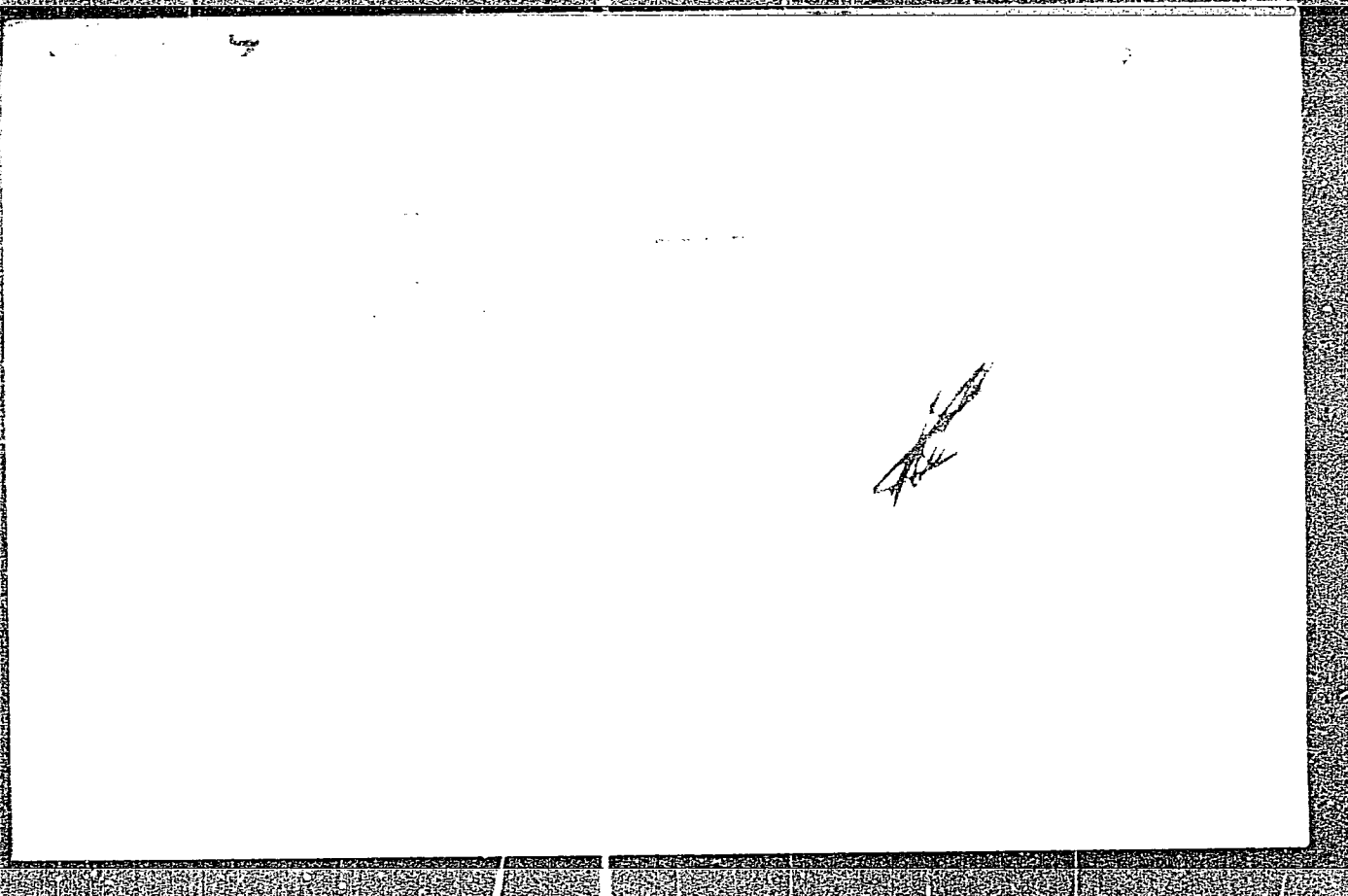
Budapest, Orvosi Hetilap, Vol 104, No 20, 19 May 1963, pp. 928-929.

Abstract: Two ampoules of Klimovan (a Hungarian-made estrogen-progesteron composition) are injected during two consecutive days. If the patient is pregnant, no vaginal bleeding occurs; however, if the result of the test is negative, bleeding will occur within 2-7 days after the second injection has been administered. The test, which carries no risk to a pregnant patient, is based on the stoppage of bleeding caused by the steroids contained in the injection. Eighteen references, including 1 Hungarian, 8 German, and 9 Western.

1/1

"APPROVED FOR RELEASE: Monday, July 31, 2000

CIA-RDP86-00513R001136030



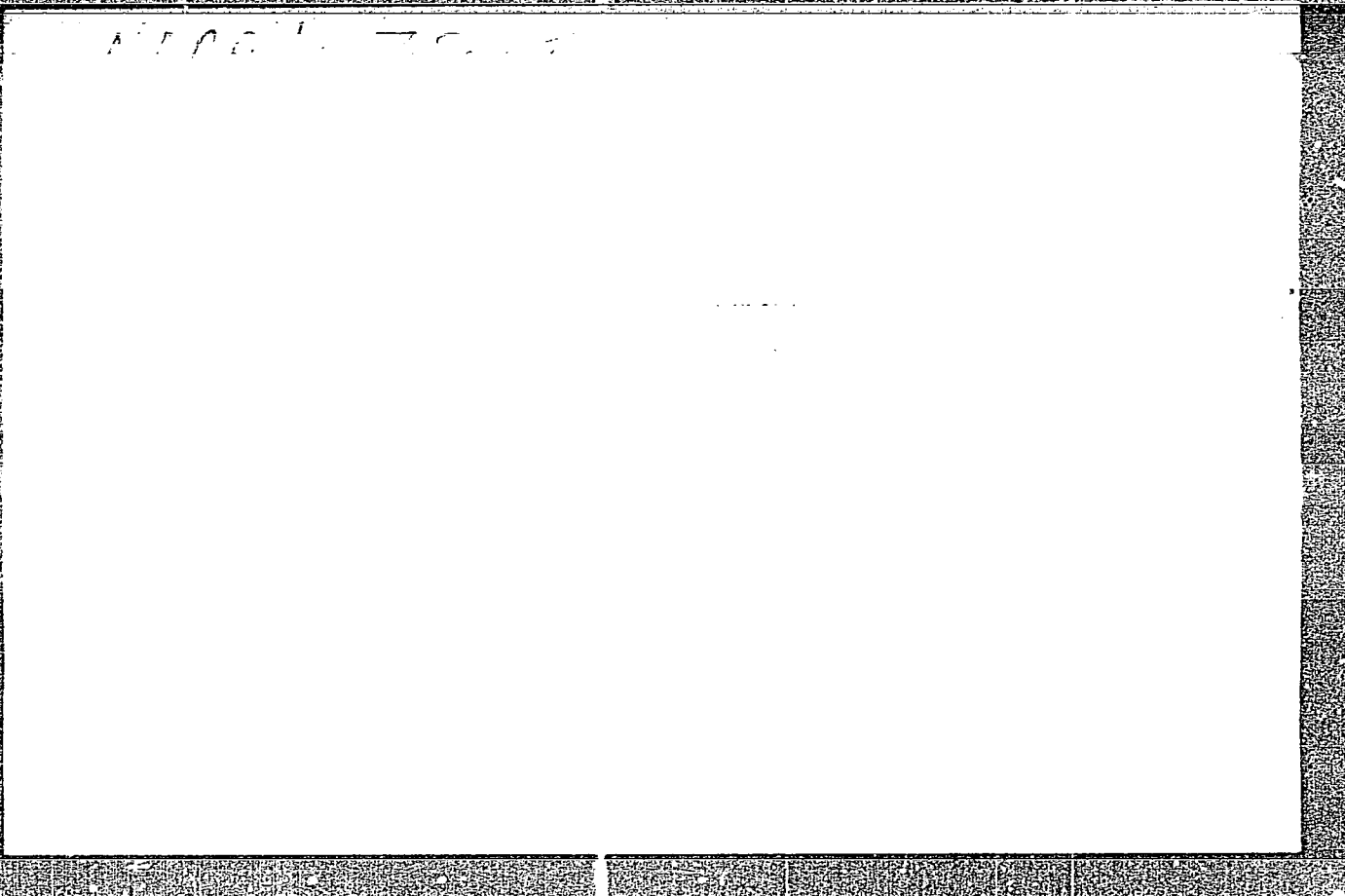
APPROVED FOR RELEASE: Monday, July 31, 2000

CIA-RDP86-00513R001136030

the theory of hydrocarbon-derivatives based on the

"APPROVED FOR RELEASE: Monday, July 31, 2000

CIA-RDP86-00513R001136030



APPROVED FOR RELEASE: Monday, July 31, 2000

CIA-RDP86-00513R001136030

NARAY, ZS.

SCIENCE

PERIODICALS: ~~ACTA ZOOLOGICA. Vol. 3, No. 4, 1955~~
MAGYAR FIZIKAL FOLYOIRAT. Vol. 3, no. 4, 1955.

Naray, Zs. Single-sweep polar oscilloscopes for measuring millimicrosecond periods. p. 383.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 2,
February 1959, Unclass.

NARAY, Z

2

HUNG.

621.383.27.032.217

3367. Determination of cathode sensitivity distribution of photomultipliers. Z. NARAY. *Acta phys. [Hungar.]* 4, No. 3, 255-66 (1955).

A method for the determination of the sensitivity distribution of photocathodes is described. The variation of the cathode sensitivity in photomultipliers is determined as a function of location on the cathode and of direction of incident light.

PH

Emil

NARAY, Zs.

Hungary/Electronics - Cathode Ray Tubes, H-6

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35143

Author: Desi, S., Naray, Zs.

Institution: Hungarian Academy of Sciences, Central Research Institute of Physics,
Budapest

Title: Circular Oscilloscope for Measuring Millimicrosecond Pulses

Original

Periodical: Acta phys. Acad. sci. hung., 1955, 5, No 1, 83-93; English; Russian
resume

Abstract: Description of a setup and of a method for measuring signals that are periodic or statistically-distributed in time, with a duration of 10^{-9} seconds and with a repetition rate of not less than 500 per second. The method is also applicable to the determination of the delay time of 2 or more signals relative to each other at an amplitude of not less than 30 v and a duration of 10^{-8} seconds. Bibliography, 8 titles.

Card 1/1

"APPROVED FOR RELEASE: Monday, July 31, 2000

CIA-RDP86-00513R001136030

NARAYAN

APPROVED FOR RELEASE: Monday, July 31, 2000

CIA-RDP86-00513R001136030

NARAY, Zs.
Category : HUNGARY/Electronics - Semiconductor devices and photoelements

H-8

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 1769

Author : Naray, Zs.

Inst : Cent. Research Inst. for Physics, Budapest, Hungary

Title : On the Reduction of the Dark Current in Photomultipliers.

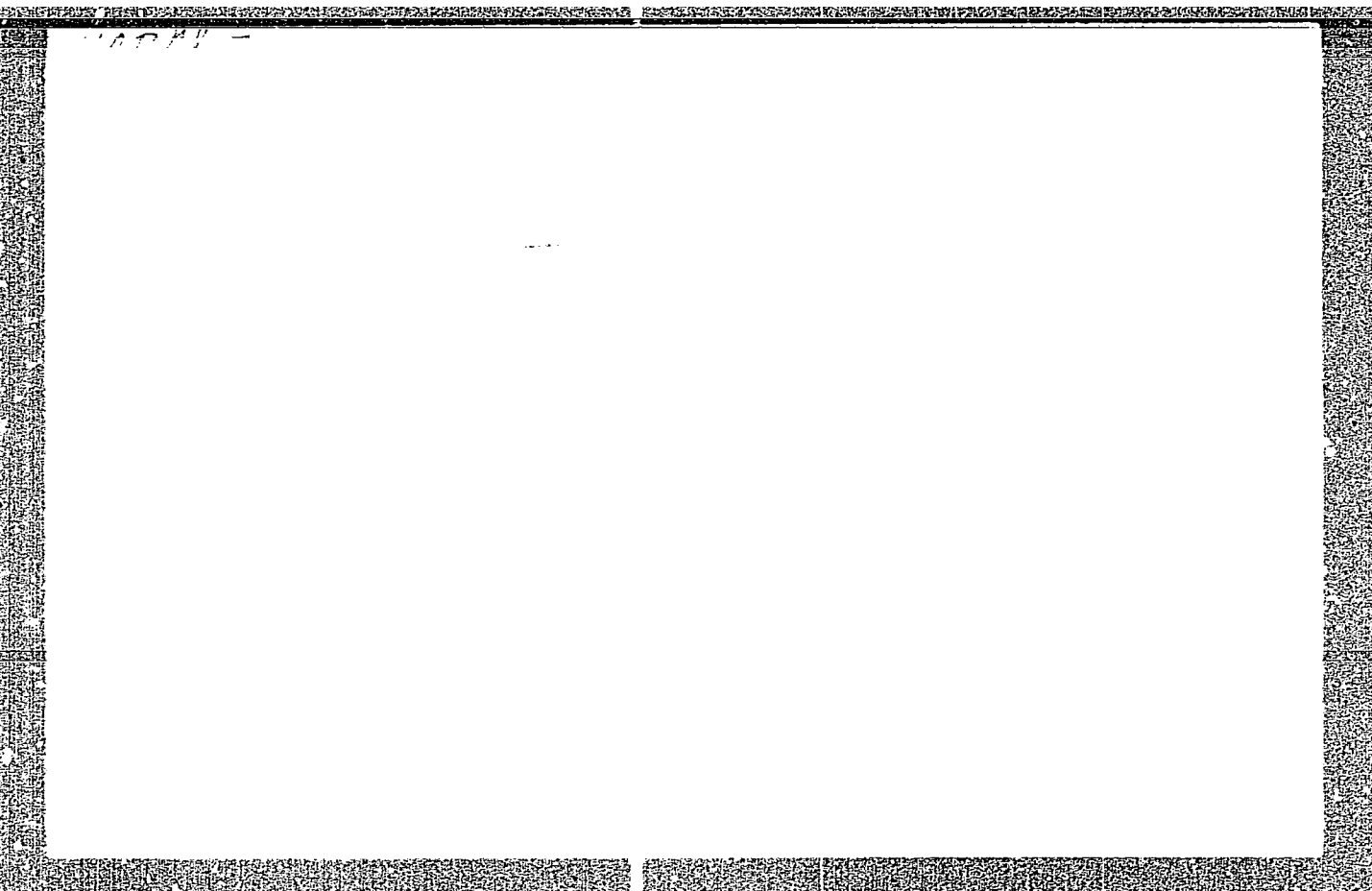
Orig Pub : Acta phys. Acad. sci. hung., 1955, 5, No 2, 159-173

Abstract : An investigation was made of the possibility of reducing the number of dark pulses in the RCA-931/A photomultiplier, without having to resort to cooling. It is possible to effect a reduction in the number of dark pulses by approximately a factor of 1,000 after properly choosing the operating mode of the multiplier such that (a) only electrons from the illuminated region of the photocathode enter into the multiplier system, and (b) the number of dark pulses is reduced to the minimum possible value by selecting the potential of the outer surface of the multiplier bulb. Bibliography, 13 titles.

Card : 1/1

"APPROVED FOR RELEASE: Monday, July 31, 2000

CIA-RDP86-00513R001136030



APPROVED FOR RELEASE: Monday, July 31, 2000

CIA-RDP86-00513R001136030

NARAY, ZS.

Impulse generator for producing impulses with positive and negative signals
per millimicrosecond. p. 41 Vol. 4, No. 1 1956. Budapest, Hungary.
MAGYAR FIZIKAI FOLYOIRAT.

SOURCE: East European List, (EEAL) Library of Congress Vol. 6, No. 1
January 1956.

"APPROVED FOR RELEASE: Monday, July 31, 2000

CIA-RDP86-00513R001136030

MARAY 20 8

APPROVED FOR RELEASE: Monday, July 31, 2000

CIA-RDP86-00513R001136030

NARAY

7-

Handwritten signature or mark

NARAY, S., TOTH, H

Measuring the spiking probability of photosensitive electron multipliers.

p. 17 (Magyar Fizikai Folyoirat) Budapest, Hungary Vol. 5, no 1, 1957

S0: Monthly Index of East European Acessions (AEEI) Vol. 6, No. 11 November 1957

HUNGARY/Optics - Physical Optics

K-5

Abs Jour : Ref Zhur - Fizika, No 12, 1958, No 28571

Author : Janossy Lajos, Naray Zsolt

Inst : Central Research Institute of Physics, Department of Cosmic
Rays, Budapest, Hungary

Title : The Interference Phenomena of Light at very low Intensities.

Orig Pub : Magyar tud. akad. Kozp. fiz. kutato int. kozl., 1957, 5, No 3,
287-300

Abstract : Using a Michelson interferometer and a photomultiplier, the authors have determined the distribution of the intensity of light in the interference fringes at very low light intensity, corresponding to 10^{-6} quantum/sec, i.e., under conditions where on the average less than one quantum was located at one time in the apparatus. Experiments, carried out at a depth of 30 meters underground with automatically controlled apparatus have shown that the distribution, within the limits of experimental accuracy, is independent of the density of light, which varied by a factor of 10^4 .

Card : 1/1

HUNGARY/Electronics -- Electron and Ion Emission

H-2

Abs Jour : Ref Zhur - Fizika, No 10, 1958, No 23275

Author : ~~Naray Zsolt~~, Toth Mihaly

Inst : ~~A~~ kozmikus sugarzas osztaly kozlensegye osztalyvezeto,
Budapest

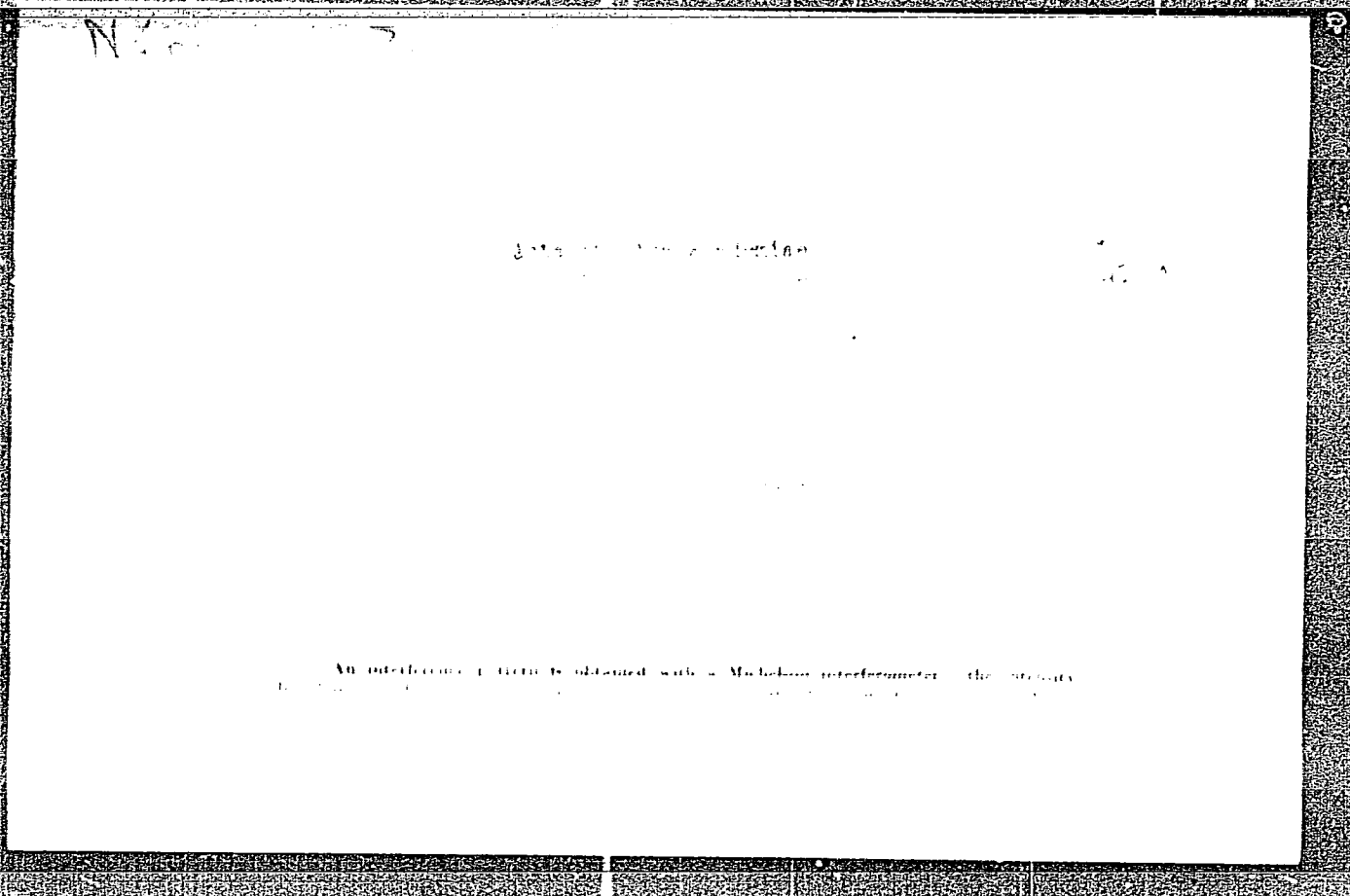
Title : The Reflection on Transparent Photocathodes

Orig Pub : Magyar tud. akad. Kosl. fiz. kutato int. kozl., 1957, 5,
No 4, 391-396

Abstract : Description of a procedure and results of measurement of
the reflection of semi-transparent photoelectronic multipliers
of the type RCA-5819 as the function of the wavelength of
the light. It was established that the coefficient of re-
flection for the wavelength corresponding to the maximum
cathode sensitivity amounts to approximately 30%.

Card : 1/1

25



Doc. 111

Atte. chancel Académie
clandestine, parisienne
111, 112, 113

111, 112, 113

111, 112, 113

111, 112, 113

111, 112, 113

111, 112, 113

111, 112, 113

HUNGARY/Electronics - Electron and Ion Emission

H-2

Abs Jour : Ref Zhur - Fizika, No 10, 1958, No 23276

Author : Nagy Zs., Toth M.

Inst : Not Given

Title : The Reflection on Transparent Photocathodes.

Orig Pub : Acta phys. Acad. sci. hung., 1957, 7, No 4, 379-383

Abstract : See Abstract 23275

Cerd : 1/1

HUNGARY/Optics - Physical Optics

K-5

Abs Jour : Ref Zhur - Fizika, No 12, 1958, No 28572

Author : Janossy L., Naray Zs.

Inst : Not Given

Title : The Interference Phenomena of Light at Very Low Intensities

Orig Pub : Acta Phys. Acad. sci. hung., 1957, 7, No 4 , 403-425

Abstract : See Abstract 28571

Card : 1/1

NARAY, Zs.

CHINA/Electronics - Electron and Ion Emission

H-2

Abs Jour : Ref Zhur - Fizika, No 10, 1958, No 23277

Author : Naray Zs. Toth M.

Inst : Not Given

Title : On the Reflection on Transperent Photocathodes

Orig Pub : Uli syuobao, Acta phys. sinica, 1957, 13, No 6, 543-546

Abstract : See Abstracts 23275 and 23276.

Card : 1/1

JANOSSY, Lajos; NARAY, Zsolt

Investigations into the dual nature of light. Fiz szemle 8 no.1:3-9
Ja '58.

1. Kozponti Fizikai Kutato Intezet Kosmikus Sugarzasi Osztaly.

NARAY, Zsolt

Brussels, 1958. Fiz szemle 8 no.9:294-296 N '58.

CHINA/Optics. - Physical Optics

K-5

Abs Jour : Ref Zhur - Fizika, No 1, 1959, No 1938

Author : Janossy L., Narry Zs.

Inst : Central Research Institute of Physics, Budapest, Hungary

Title : Phenomenon of Interference of Light at Very Low Intensity

Orig Pub : Uli syuebo, Acta phys. sinica, 1958, 14, No 1, 37-53

Abstract : Interference of light was produced by means of a Michelson interferometer; the distribution of the intensities was determined in it by calculating the distribution of the number of photons with the aid of a photomultiplier. It is shown that for a very low light intensities the pattern does not differ (within the limits of experimental error) from the pattern obtained at ordinary intensities. At low intensities, approximately 10^6 photons enter the interferometer during each second, thus, at very small intensities at any instant of time there is on the average less than one photon inside the interferometer at any instant of time.

Author's resume

Card : 1/1

NARAY, Zsolt

Application of retarded feedback in electronic electric circuits. *Magy*
fiz folyoir 7 no.6: 495-505 '99. (HAI 9:4)

1. Keszonti Fizikai Kutató Intézet, Fizikai Optikai Laboratorium.
(Electronics) (Electric circuits) (Feedback(Electronics))

NARAY, Zsolt; VARGA, Peter

Production of light pulses of nsec rise time and duration with gas discharge tubes. Koz fiz kozl MTA 8 no.2/3:161-165 '60.

(EEAI 10:4)

1. A Magyar Tudomanyos Akademia Kozponti Fizikai Kutato Intezete,
Fizikai Optikai Laboratorium.
(Light)

JANOSSY, Lajos, dr.; NARAY, Zsolt; VARGA, Peter

Experimental investigation of the correlation of coherent light beams. Koz fiz kozl MTA 9 no.4:197-205 '61.

1. Felelos kiado, "A Magyar Tudomanyos Akademia Kozponti Fizikai Kutato Intezetenek Kozlemenyei" (for Janossy). 2. Editorial Board member, "A Magyar Tudomanyos Akademia Kozponti Fizikai Kutato Intezetenek Kozlemenyei" (for Naray).

BAKOS, Jozsef; KANTOR, Karoly; NARAY, Zsolt

Interferences among wave group series produced by amplitude division.
Koz fiz kozl MTA 9 no.5/6:307-316 '61.

1. "Magyar Tudományos Akadémia Központi Fizikai Kutató Intézetének
Közleményei" szerkesztő bizottsági tagja (for Naray).

FARKAS, Gyozo; JANOSSY, Lajos; NARAY, Zsolt; VARGA, Peter

Experimental tests for determining the correlation of coherent light beams. Koz fiz kozl MTA 11 no.2:89-97 '63.

1. "A Magyar Tudományos Akademia Kozponti Fizikai Kutato Intezetenek Kozlemenyei" felelos koadoja (for Janossy).
2. "A Magyar Tudományos Akademia Kozponti Fizikai Kutato Intezetenek Kozlemenyei" szerkeszto bizottsagi tagja (for Naray).

TAKACS, J.; MURAYAN, K.G.

Sopilage of ~~meat~~ due to Clostridia. Acta vet. acad. sci. Hung.
15 no.4:457-460 '65.

1. Central Laboratory of Veterinary Meat Control Service Budapest,
Hungary (Head: J. Takacs). Submitted June 4, 1965.

NARAY-SZABO, Gabor

Kinetic analysis of the absorption of gases by bubbling.
Veszprem vegyip egy kozl 8 no.1:71-79 '64.

1. Chair of Physical Chemistry of the Chemical Industry
University, Veszprem. Submitted November 25, 1963.

CIA-RDP86-00513R001136030C

101 and 102 (1958) PROPERTIES AND PROPERTIES INDEX

7

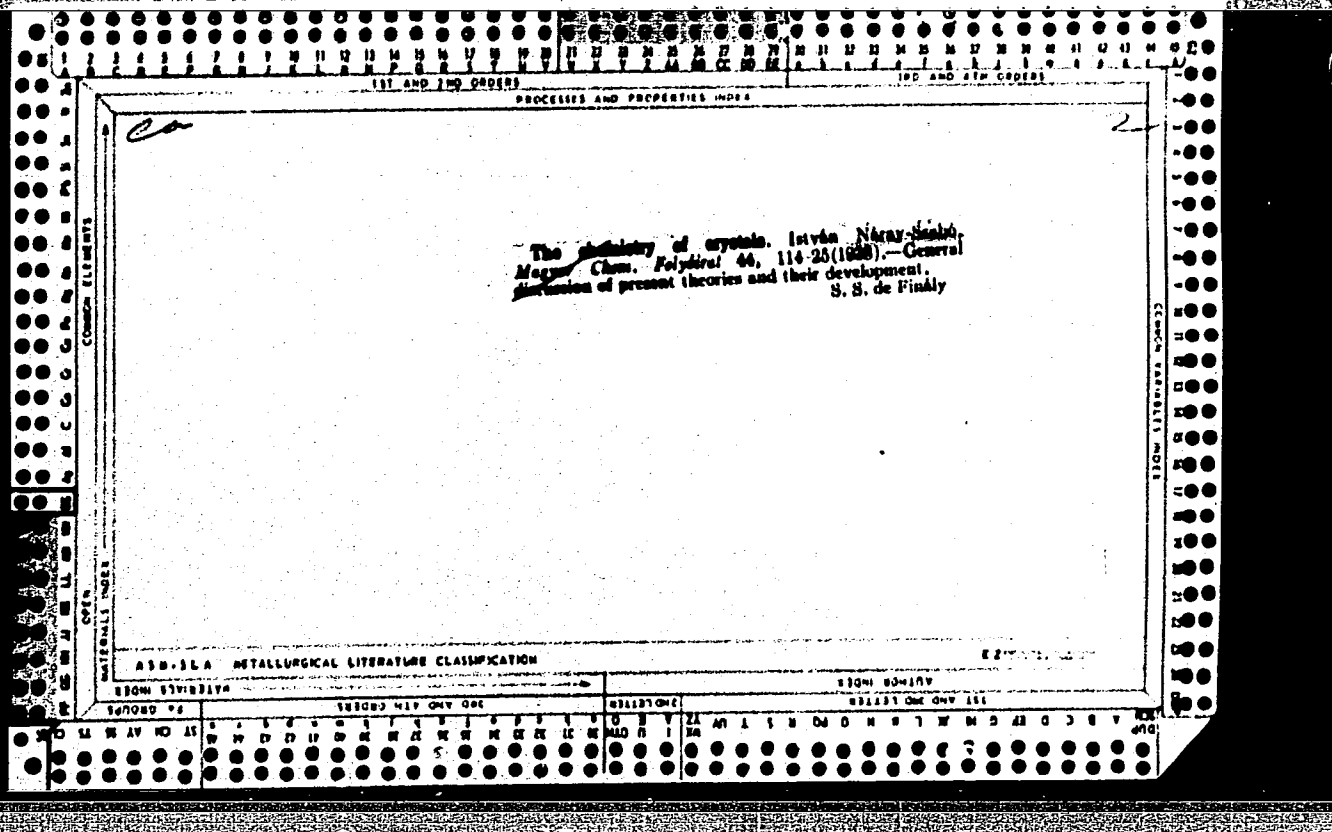
RECOVERY OF IODINE FROM RESIDUES. ISTVÁN NARAY-SZABÓ AND ZOLTÁN SZABÓ. *Magyar Chem. Folyóirat* 36, 95-100 (1932).--The residues are treated with 5 cc. satd. NaNO_2 soln. and 5 cc. concd. H_2SO_4 per l. and the updt. I is shaken out with 100 cc. CCl_4 . The I is dissolved with 10% NaOH and the CCl_4 again used for extn. The I is freed from the NaOH soln. by acid and purified by sublimation. If KI is wanted, KOH is used for extn. and the satd. soln. treated with H_2O_2 to oxidize hypiodite to iodate and this is converted to iodide. S. S. DE FINALLY

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

101 and 102 (1958)

[illegible]

COMMON ELEMENT										PROCESSES AND PROPERTIES INDEX										SIGNATURE INDEX									
M																				7									
*The Overvoltage of Hydrogen on Mercury. St. v. NÁRAY-SZABÓ (Mat. Természettudományi Közlemények A.M. Tud. Akad. III. Osztályának Folyóirata, 1937, 86, 672-680).—[In Hungarian, with German summary.] See preceding abstract.—D. 8.																													
ASB-51A METALLURGICAL LITERATURE CLASSIFICATION																													
SIGNATURE INDEX										SIGNATURE INDEX										SIGNATURE INDEX									
SIGNATURE INDEX										SIGNATURE INDEX										SIGNATURE INDEX									



CIA-RDP86-00513R001136030C

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100																									
1ST AND 2ND COVER																									
PROCESSOR AND ACQUISITION INDEX																									
ca 5 The mechanism of hydrogen overvoltage. Istvan Nagy-Szabo. Z. physik. chem. A181, 307-4 (1934). The overvoltage of H₂ was measured on cathodes of Pt, Ag, Cu and Hg in 2 N HCl and 2 N H₂SO₄. The data obtained from surfaces said. with H follow Tafel's equation. On Pt the relation of overvoltage to the degree of satn. is remarkable. To explain various phenomena 2 assumptions of mechanism are required: a mechanism of charging on cathode surfaces said. with H and an adsorption mechanism on unsatd. surfaces. A partial satn. is indicated by the difficulty reproducible transition forms. R. H. Buehler																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 ASS-56A METALLURGICAL LITERATURE CLASSIFICATION																									
ca 5 </																									

1ST AND 1ST STREET												1ST AND 1ST STREET											
PROCEDURES AND PROPERTIES INDEX																							
ea 2 Crystal chemistry of the silicates. I. Naray-Seabó. <i>J. Am. Chem. Soc.</i> 62, No. 3, 1-6 (1940).—A review of the development of crystal chemistry in general and of struc- ture of the silicates in particular, with description of theo- ries by Bragg, Bravais, Laue, Goldschmidt and Bragg. B. C. P. A.																							
AMERICAN METALLURGICAL LITERATURE CLASSIFICATION												C-1275-1276											
FROM STRUCTURE												FROM SYMBOL											
SYMBOLS AND ABBREVIATIONS												SYMBOLS AND ABBREVIATIONS											

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
C.A.										2									
The calculation of reaction balances on the basis of thermal data. Soviet Metall. Magaz. Chem. Polym. 65, 50-52(1948).—Data. of the abn. values for entropy makes possible the calcn. of reaction balances (equilibrium). The simplified method of 1/10th is presented and explained in connection with ammonia synthesis. G. S. de Pinsky																			
ABO-SLA METALLURGICAL LITERATURE CLASSIFICATION																			
1950-1959										1960-1969									
1970-1979										1980-1989									
1990-1999										2000-2009									

1ST AND 2ND ORDERS																									
PROCESSES AND PROPERTIES INDEX																									
9 CA X-ray investigation of Hungarian bauxite ores. István Náray-Szabó and Jeno Neugebauer (Univ. Tech. Sci., Budapest, Hungary). <i>Technika</i> (Budapest) 25, 259-63 (1944).--The possibility of working up ores according to the method of Bayer depends upon the form of $Al(OH)_3$ present in the ores. X-ray powder photographs seemed to be suitable for detg. the compds. (other than salts) present in bauxite ores. Ores contg. böhmite or hydrargillite seem to be suitable for the method of Bayer; the presence of diaspor is disadvantageous. István Finály																									
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION																									
MATERIALS INDEX																									
1ST AND 2ND ORDERS																									

CIA-RDP86-00513R001136030C

CIA-RDP86-00513R0011360300

1ST AND 2ND SERIES		PROCESSING AND PROPERTIES INDEX		3RD AND 4TH SERIES	
100		2		100	
The crystal structure of sodium iodate. J. Náczy-Szabó and J. Némethy (Univ. Tech. Econ. Sci., Budapest, Hungary). <i>J. Am. Chem. Soc.</i> 69, 1280-3 (1947).—					
Sodium iodate has an orthorhombic lattice with space group $V_2^2 = Fm\bar{3}m$, $a = 8.75 \text{ \AA}$, $b = 8.37 \text{ \AA}$, $c = 8.10 \text{ \AA}$, $z = 4$. The structure was completely detd. by the aid of oscillation diagrams. It contains distinct IO_3 radicals with the I-O distances 2.40 and 2.55 $\text{ \AA}$, resp. Other distances are: I-O 2.65 $\text{ \AA}$ (2 neighbors), 2.65 $\text{ \AA}$ (1 neighbor), 2.65 $\text{ \AA}$ (1 neighbor), 2.65 $\text{ \AA}$ (1 neighbor); Na-O 2.37 $\text{ \AA}$ (4 neighbors), 2.44 $\text{ \AA}$ (2 neighbors); Na-I 2.46 $\text{ \AA}$; O-O 2.16, 2.25, 2.31, 2.55 $\text{ \AA}$. Harry H. Sisker					
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION					
EDGE STUDY		EDGE STUDY		EDGE STUDY	
SANDS #2		SANDS #2		SANDS #2	
SANDS #2		SANDS #2		SANDS #2	

1ST AND 2ND SERIES										3RD AND 4TH SERIES									
PROCESSES AND PROPERTIES INDEX																			
<i>CH</i> 2 The theory of mixed crystals. István Némethy-Szabó and J. I. Horváth. <i>Hung. Acta Chim.</i> 1, No. 3, 34-40 (1948).—The lattice energy and lattice const. of the mixed crystals NaCl-NaBr were calcd. by use of the Born-Mayer formula. Only 2 consts. (the mol. vol. and the compressibility of the mixed crystals) were necessary. The latter is obtained by linear interpolation on the basis of the compressibility values of the pure crystals. The results differed by 0.01-0.5% from those of Born and Mayer, and of Mayer and Helmholtz in case of lattice const. and by somewhat more in case of lattice energy. The calcd. lattice energy of the mixed crystal was somewhat lower than that of the pure salts. István Flódy.																			
480.55 A METALLURGICAL LITERATURE CLASSIFICATION																			
1ST AND 2ND SERIES										3RD AND 4TH SERIES									

NARAY-SZABO, I.

NARAY-SZABO, I. - The binding and hardening of portland cement. p. 290.
Vol. 8, no.8, Aug. 1956
EPITOANYAG - Budapest, Hungary.

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4--April 1957

HUNGARY/Chemical Technology - Chemical Products and Their Application. Ceramics. Glass. Binders. Concrete. II-13

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 25986

Author : Kovacs Jozsef, Naray-Szabo Istvan, Novak Andras

Inst : -

Title : Production of Acid-Resistant Concrete by Means of a Gas Treatment.

Orig Pub : Magyar Epitoipar, 1957, 6, No 3-4, 139-142.

Abstract : Description of a method of treatment of concrete articles with SiF_4 under pressure, to increase the resistance of such articles to the action of acids and salts.

Card 1/1

- 31 -

HUNGARY/Physical Chemistry. Liquids, Amorphous Bodies, Gases. B

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 73159.

HUNGARY/Physical Chemistry. Liquids, Amorphous Bodies, Gases.

The case of one-component glasses produced by glass-forming oxides (SiO_2 , B_2O_3 , P_2O_5), v equals 21.1 to 22.7 $\text{\AA}^3$, and v in the corresponding crystalline substances equals 18.85 to 20.48 $\text{\AA}^3$. $v = 14.0 \text{\AA}^3$ corresponds to the densest packing of oxygen ions. The dependence of v on the composition in the case of two-component glasses is described by the following equations: $v = 3.8R + 15.3$ in the case of SiO_2 - B_2O_3 , $v = 3.8R + 14.9$ in the case of Na_2O - SiO_2 , and $v = 12R - 1.2$ in the case of K_2O - SiO_2 . Similar equations were also derived for two-component silicate glasses containing CaO , SrO and PbO . Sodium-silicate glasses with an addition of Al_2O_3 or BeO are described by similar equations, in which the constant at R does not change and the second constant is negative, but the two other constants do not change practically. The above effect decreases in the case

Card : 2/4

Card : 3/4

HUNGARY/Physical Chemistry. Liquids, Amorphous Bodies, Gases. B

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 73159.

series ZrO_2 , TiO_2 , Bi_2O_3 , MgO , CaO , ZnO and BaO . PbO increases v somewhat. A similar regularity is observed in the case of potassium-silicate glasses, in which PbO also produces a decrease of v . Considering the obtained results from the point of view of a disordered lattice, the author assumes that v is the little, the more the lattice tetrahedrons are bound together with common oxygen ions, R being the measure of that binding. Cations-modifiers either decrease, or increase v depending on their ion radii and charges. All the studied cations decrease v in the case of potassium-silicate glasses, and that effect is expressed in them considerably stronger than in sodium-silicate glasses.

Card : 4/4

Distr: h22c

Regularities in the properties of the elements in the periodic system. I. Nányi-Szabó (Hung. Acad. Sci., Budapest). *Acta Chim. Acad. Sci. Hung.* 17, 81-91 (1958) (in German). At. vols. (V), b.p., and m.p. of elements depend on whether the solid-state structure forms an at., a mol., or a metallic lattice. V disclose definite periodicity in that sharp max. appear at the alkali metals and lower peaks in both 8-member periods. In contrast, the curve of V is smooth in both 18-membered periods. In both of the latter periods certain irregularities are provoked by the appearance of lanthanides and of actinides. In general, the lowest m.ps. occur at the elements with mol. lattice, sharpest min. appearing at the rare gases with a monat. lattice. With polyat. mol. lattices, m.ps. increase parallel to the no. of atoms in the mol. The main max. appear at the at. lattices of C, Si, and Ge, as strong covalent bonds are produced by interat. forces. The m.ps. are greatly affected by the change in the type of lattice. The b.p. curve shows, on the whole, a slope parallel to that of the m.p. curve. The entropy of evapn. at the b.p. discloses fluctuations of relatively small extent (varying approx. in the interval 17-28 cal./g. atom). On comparing the individual data and the shapes of the curves of V , m.p., b.p., and values of b.p./m.p. on the Kelvin scale, no similarity appears between lanthanides and actinides, in agreement with Zachariasen (cf. *C.A.* 47, 9095d) according to whom Th, Pa, and U atoms in the metallic state do not contain 5f-electrons. M. J. D. Low

3
1

PHASE I BOOK EXPLOITATION

HUN/3773

Náray-Szabó, István

Anorganische Chemie, Vol 1 (Inorganic Chemistry, Vol 1) Budapest, Verlag der Ungarischen Akademie der Wissenschaften, 1959. 664 p. [Translated from the Hungarian] No. of copies printed not given.

Translator: Andráš Beliczay, Engineer; Reviewers: Bela Lengyel, Laureate of the Kossuth Prize, Doctor of Chemistry, and Zoltán Szabó, Academician, Laureate of the Kossuth Prize, Doctor of Chemistry; Reviewer of the German text: Walter Schicke, Doctor.

PURPOSE: This monograph is intended for chemists and physicists.

COVERAGE: This first volume of a three volume handbook of inorganic chemistry represents an attempt to present a comprehensive general reference work of moderate size. All important physical and chemical data on the elements and certain well-known compounds are included. Technological and production data, physiological behavior and analytical tests are not treated in detail.

~~Card 1/15~~

Inorganic Chemistry, Vol 1

HUN/3773

Only strictly inorganic compounds are discussed. Elements with their compounds are given in the order of the periodic table. Detailed subject and formula indexes facilitate finding an element or compound. Volume one opens with a general introduction followed by the nonmetallic elements (groups VIIb - IIIb) and their compounds. Tin and lead are discussed in group IVb. Theoretical and physicochemical discussions are brief. The development of atomic theory, nuclear chemistry, and the theory of chemical bonds is covered in general terms in the introduction. The results of molecular and crystal structure research have in every case been taken into consideration. The lanthanides and actinides, and their compounds are described from the point of view of the present state of science. Special attention has been given to physical constants of elements and compounds, and the best available values have been carefully selected. For certain compounds no physical constants are given since they are not to be found in the literature. The author thanks the translator, A. Beliczay. There are 145 references: 78 German, 53 English, 10 French, 3 Soviet and 1 Hungarian.

TABLE OF CONTENTS:

Introduction

11

Card 2/13

HUNGARY/Atomic and Molecular Physics - Liquids.

D

Abs Jour : Ref Zhur Fizika, No 4, 1960, 8540

Author : Maray-Szabo

Inst : Chemical Central Research Institute, Hungarian Academy of Sciences, Budapest

Title : Connection Between Structural and Physical Properties of Glass III: Thermal Expansion of Glass

Orig Pub : Acta phys. Acad. Scient. hung., 1959, 9, No 4, 403-421

Abstract : To calculate the dependence of the linear coefficient of expansion of glass on the composition, linear equations are proposed of the form $\alpha \cdot 10^8 = a(\text{Na}_2\text{O}) + b(\text{K}_2\text{O}) + c(\text{MgO}) + \dots + A$, where $a, b, c, \dots$ are factors for the corresponding oxides (Na_2O), $\dots$ -- contents of the oxides in glass, percentage by weight, and A is a constant, the magnitude of which differs with the type of

Card 1/2

NARAY- SZABO, I

Distr: $H_2O(j)$

606.116

107:40 Recent results in glass research. I. Naray-Szabo.
 10. *Splicing*. Vol. 11, 1950, No. 4, pp. 132-138, 1 tab.

A new characteristic of the physical properties, utilization and structure of glass, namely the absolute value:

of the volume occupied by the oxygen ion, has been established on the basis of numerous reliable analyses and specific gravity determinations. The linear mathematical relationship determining the number of oxygen ions per lattice cation was established for many kinds of glass as well as the factors of lattice modification ions. The effects are simply added in the presence of several ions, the deviation between measured and computed results amounting in general to a few tenths of per cent. The result of the investigations on the coefficient of thermal expansion proved that the latter was independent of the lattice-forming oxides i.e. that it was a function of the lattice-modifying oxides only. This corroborates the notion that glass possesses a nonperiodic spatial lattice. The tensile strength of silica glass was computed by electrostatic means (2640 kg per sq.mm) and values approximating it were measured on very thin individual threads of silica glass. A new definition of glass, based on the above, is given; in conformity with the crystallite theory, the new definition offers an explanation for many of the physical characteristics of glass.

NARAY-SZABO, I.

Oxygen-ion volume and viscosity of glass fusions. p.350

EPITOANYAG. (Epitoanyagipari Tudományos Egyesület)
Budapest, Hungary
Vol. 11, no.10, Oct. 1959

Monthly List of East European Accessions (EEAI) LC., Vol. 8, no.12, Dec. 1959
Uncl.

Oxygen ion volumes, heat expansion, and structure of glass. I. Náray-Szabó (Hungarian Acad. Sci., Budapest). *Glastech. Ber.* 32, 186-9 (1959).—The volume, v , in cu. Å. in glass is a function of its compn., esp. a linear function of $R = O/(Si + B + Al + \dots)$, i.e., of the concn. in network-forming cations; $v = aR + b$ (a and b are consts.). Formulas are given for binary glasses e.g. of the systems Na_2O-SiO_2 , K_2O-SiO_2 , $SiO_2-B_2O_3$, and $Na_2O-P_2O_5$; v is calcd. from d. data. Calcd. and exptl. numerical material for R and v is tabulated with good agreement for both parameters. The extension of this treatment to ternary and polyary glasses is easily possible by developing systems of additive arithmetic functions of the compn. Simple equations are also given for the thermal expansion of glasses as a function of compn.; in these, the distinction of network-forming and modifying cations is very striking. Concerning the constitution of glasses, N. critically discusses the crystallite and network theories. He tries to give a new definition of oxide glasses on the postulate that (XO_4) anions must build up the structure in a nonperiodic network, together with modifying Y cations. The "glasses proper," with R varying between 2.0 and 2.7 (borosilicates may show a low R down to 1.6), have gradual transitions to glasses with higher R values, but these glasses have a low mech. strength, devitrify easily, and are attacked by H_2O . Amorphous B_2O_3 , As_2O_3 , and Sb_2O_3 are not "glasses proper," because they consist of discrete mols. W. Rittel

4E2C ij
3

and
111

99

NARAY-SZABO, Istvan, dr. (Budapest, II., Pusztaszeri ut 57/69);
ARGAY, Gyula (Budapest, II., Pusztaszeri ut 57/69)

Crystal structure of sodium selenate (Na_2SeO_4).
Acta chimica Hung 39 no.1:85-92 '63.

1. Zentralforschungsinstitut für Chemie der Ungarischen
Akademie der Wissenschaften, Budapest.

NARAY-SZABO, Istvan, a kémiai tudományok doktora

AN account of my study trip to the German Democratic Republic.
Kém tud kozl MTA 21 no. 1:123-124 '64.

1. Central Chemical Research Institute, Hungarian Academy of
Sciences, Budapest.

NARAY-SZABO, Istvan, a kémiai tudományok doktora; KELEN, Tibor;
SOMODY, Arpad

An account of the 4th All-Union Conference on Vitreous State
held in Leningrad. Kem tud kozl MTA 22 no.3/4:449-451 '64.

1. Central Research Institute of Chemistry, Hungarian, Academy
of Sciences, Budapest (for Naray-Szabo). 2. United Incandescent
Lamp and Electricity Company, Budapest (for Kelen).
3. Tokod Glass Factory, Tokod (for Somody).

NARAY-SZABO, Istvan, dr.; ARGAY, Gyula

Crystal structure of crocoite, PbCrO_4 . Acta chimica Hung 40 no.3:
283-288 '64.

1. Zentralforschungsinstitut für Chemie der Ungarischen Akademie
der Wissenschaften, Budapest, II., Pusztaszeri út 57/69.

ALBERT, Janos; NARAY-SZABO, Istvan

Analysis of the composition of brick and tile industry materials.
Epitoanyag 17 no.4:113-125 Ap '65.

1. Central Research Institute of Building Materials Industry
of the Ministry of Construction, Budapest (for Albert). 2. Central
Research Institute of Chemistry of the Hungarian Academy of Sciences,
Budapest (for Naray-Szabo).

HUNGARY/Atomic and Molecular Physics - Liquids

D-8

Abs Jour : Ref Zhur - Fizika, No 10, 1958, No 22689

Author : Nagy-Szabo J.

Inst : Central Chemical Institute of the Hungarian Academy of Sciences, Budapest.

Title : Connection Between the Structure and Physical Properties of Glass. I.

Orig Pub : Acta phys. Acad. sci. hung., 1957, 8, No 1-2, 36-64

Abstract : Starting with the concept of continuous disordered spatial lattice and using data on the compositions and specific weights of several hundreds types of glass, the author calculates the volume V per single ion $O^=$. Formulas are derived pertaining the glasses of various compositions and relating V and R , where $R=O/(Si+B+Be+Al+F)$ (the symbols of the element denote the amounts of gram atoms contained in the composition of the glass). R is a measure of the connectedness of the tetrahedra of SiO_4 , BO_4 , AlO_4 , etc. In the case of single-component glasses, V ranges from 21.1 to 22.7 $\text{\AA}^3$. In the

Card : 1/2

COUNTRY : Hungary H-13
 CATEGORY :
 ABS. JOUR. : RZKhim., No. 1959, No. 87365
 AUTHOR : Szuk, G.; Naray-Szabo, J.
 INST. : Hungarian Academy of Sciences
 TITLE : Setting and Hardening of hydraulic materials.
 I. The Setting and Hardening of Paris Plaster.
 II. Conductometric Analysis of setting of *
 ORIG. PUB. : Acta techn. Akad. scient. hung., 1958, 22,
 No 1-2, 67-82, 83-100
 ABSTRACT : I. To study the setting and hardening of
 gypsum use was made of the procedure of measurement of
 electric resistance of the products of hydration that are
 formed as a result of the reaction of gypsum with water.
 Samples of finely ground gypsum mixed with varying amounts
 of distilled water were placed in a cubical chamber the two
 opposite walls of which, made of copper, were the electrodes.
 Temperature of the samples was measured at first at half-
 minute intervals, and later on less often. Electric re-
 sistance was determined by passing a 50 cycle alternating
 current, as a function of time (for up to 280 days). During
 initial stage of the process there is still observed some
 CARD: 1/6
 * Cement Pastes under isothermic Conditions.

COUNTRY : HUNGARY H-15
 CATEGORY :
 ABS. JOUR. : RZKham., No. 1959, No. 87365
 AUTHOR :
 INST. :
 TITLE :
 ORIG. PUB. :

ABSTRACT : dissolution of gypsum, then begins formation of needle-crystals of dihydrate. Interlacing of these crystals results in gradual decrease of current-conducting cross-section of saturated solution and an increase of resistance. This phenomenon reaches a maximum as a result of drying up of main body of saturated solution, after which resistance of the sample begins to change in inverse proportion to the change in relative humidity of the air. These data are in agreement with results obtained on determining the consistence of the samples by means of Vicat apparatus. After addition into the chamber of an electrolytic solution and the introduction of dielectrics (glass balls, sand) the

CARD: 2/6

COUNTRY : Hungary
CATEGORY :

H-13

ABS. JOUR. : RZKhim., No. 1959, No. 87365

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : 5-10 minutes. At the same time a determination was made of the temperature and, in duplicate chambers, of the pH of the paste by means of electrodes of Sb and Ag/AgCl. Samples of portland- and slag-portland cement, with 46% of slag, were studied. Electric resistance curves showing three strongly manifested effects were obtained. The first of them corresponds to beginning of setting of the paste, and the third -- to the end of setting. These effects are readily observed and provide a more accurate picture of the process than results of determination of the time of setting with Vicat apparatus. The pH variation curve of the paste shows that concentration of Ca(OH)_2 in solution increases

CARD: 4/6

199

COUNTRY : Hungary

H-13

APPROVED FOR RELEASE: Monday, July 31, 2000

CIA-RDP86-00513R001136030

ABS. JOUR. : RZKhim., No. 1959, No. 87365

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : only during a short initial period, decreasing considerably thereafter. This is due to the fact that the silicagel and alumina gel which are formed on hydrolysis combine with Ca(OH)_2 more rapidly than it passes in solution due to hydrolysis of cement particles. Temperature curve drops somewhat at first, as a result of evaporation, and then becomes horizontal, evidently because of some precipitation (this phenomenon has not yet been investigated). To this corresponds also the horizontal portion of pH curve. Then the concentration of ions begins to drop and reaches a minimum, when the temperature also becomes stabilized, which indicates a new process of crystallization or adsorption.

CARD: 5/6

200